

Notice of Allowability

Application No.

09/746,860

Examiner

Tuan A Vu

Applicant(s)

CROIX, JOHN F.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/30/2004.
2. ☒ The allowed claim(s) is/are 1-22 and 24-49(now renumbered 1-48).
3. ☒ The drawings filed on 30 August 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 8/30/2004.

As indicated in Applicant's response, claims 1, and 24-31 have been amended; claims 23, 50-57 canceled. Claims 1-22, 24-49 are pending in the office action.

EXAMINER'S AMENDMENT

2. The application has been amended as follows:

As per claim 1, at line 7, amend as following:

compiling said second sub-file of source code, said compiling including[,];

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

3. Claims 1-22, 24-49 are allowed.

The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination fails to teach or suggest the following claimed features:

A method, comprising (i) generating a first sub-file of source code; then encrypting said first sub-file of source code; then writing said first sub-file of source code to a buffer; then reading a second sub-file of source code from said buffer; then decrypting said second sub-file of source code; and then compiling said second sub-file of source code, said compiling including (ii) generating a first sub-file of intermediate source code; then encrypting said first sub-file of intermediate source code; then writing said first sub-file of intermediate source code to another buffer; then reading a second sub-file of intermediate source code from said another buffer; then decrypting said second sub-file of intermediate source code; and then compiling; said second sub-file of intermediate source code as recited in claim 1.

CHIANG, WO 9941651, discloses compiling a source code into bytecodes, encrypting it; and store it into the recipient client memory, wherein the runtime loader in a runtime compiler (JVM) alternately decrypts the encrypted parts or executes the non-encrypted parts; all of which appears to fulfill step (i) but fails to teach the use of a buffer; nor does Chiang discloses in the step of compiling the sequence of steps listed in (ii); nor does Chiang's runtime compiler after decrypting and executing the encrypted code suggest anything that would render the sequence of (ii) obvious.

WEBB, GB 2343022, discloses encrypting the Class File distributed to the client machine JVM so that the client machine performs the decryption of encrypted portions of the code listed by the Class File prior to execution, just like Chiang from above; but fails to teach a buffer as in (i); nor does Webb teach, subsequent to the decryption and compiling by the client machine JVM as in Chiang's, the steps of (ii); nor does Webb suggest anything that would render those steps obvious.

TANAKA, USPN: 6,684,389, discloses creating a libraries of encrypted objects, such objects having encrypted keys enabling the recipient end compiler to selectively decrypt and make use of the distributed code according to security scheme definitions, hence basically teaches the steps of (i) but fails to teach a buffer and the subsequent steps of (ii) after the first decryption has been performed.

KUSAKABE, USPN: 6,073,236, discloses decrypting received code into plain text; then after some elapse time, encrypting it again for retransmission back to the sender; but does not teach subfiles of source code being stored in buffer, and decryption thereof in a compilation process as in (i) followed by the sequence in (ii).

Even though Webb and Chiang or Tanaka provide bytecodes with encrypted sub-file or subsets therein for the recipient JVM to decrypt and compile at runtime as required in step (i); Webb and Chiang (or Tanaka) suggest no motivation to create a buffer to store subsets or subfiles after encrypting them, and to subsequently create more subfiles or subsets of the distributed bytecodes at the recipient end to repeat the process of storing more encrypted subsets for further decryption using said buffer; because Webb, Tanaka and/or Chiang's JVM is ready to load and execute on-the-fly the received code; and there is no need for iterating/repeating a re-encryption/decryption sequence of steps of (ii) that would require a temporary storage as required by (i).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

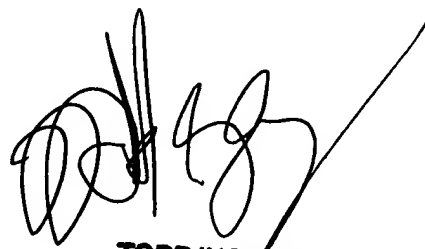
The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence – please consult Examiner before

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using) or 703-872-9306 (for official correspondence) or redirected to customer service at 571-272-3609.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
September 14, 2005



TODD INGERG
PRIMARY EXAMINER